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UNITED STATES DISTRICT COURT
DISTRICT OF NEVADA
RENO, NEVADA

CYNTHIA JEAN GOFF as)	3:03-CV-0690-ECR-RAM
administrator of the estate)	
of Lawrence J. Torango,)	
)	
Plaintiff,)	<u>ORDER</u>
)	
vs.)	
)	
HARRAH'S OPERATING COMPANY,)	
INC., HARVEY'S TAHOE)	
MANAGEMENT COMPANY, INC.,)	
HARRAH'S LAUGHLIN, INC.,)	
ARISTOCRAT LEISURE LIMITED,)	
ARISTOCRAT TECHNOLOGIES, INC.,)	
AND INTERNATIONAL GAME)	
TECHNOLOGY,)	
)	
Defendants.)	
)	

Plaintiff Cynthia Goff, as the administrator of the estate of Lawrence J. Torango, (hereinafter "Goff" or "Plaintiff") and Defendants Harrah's Operating Company, Inc., Harveys Tahoe Management Company, Inc., Harrah's Laughlin, Inc., Aristocrat Leisure Limited, Aristocrat Tehcnologies Australia Pty. Limited, Aristocrat Technologies, Inc., and International Game Technology (hereinafter "Defendants") filed a Joint Claim Construction and Prehearing Statement (#87) on January 4, 2005. Plaintiff and Defendants both filed their opening briefs (##97, 89) on January 25, 2005, and responses (## 101, 100) on February 18, 2005. In

1 addition, Defendants filed a Motion for Summary Judgment (#189) on
2 September 10, 2005, which Plaintiff opposed (#192) on October 11,
3 2005. Plaintiff filed a cross-motion for summary judgment (#193)
4 on October 11, 2005, which Defendants opposed (#195) on October 24,
5 2005. Defendants replied (#194) to Plaintiff's Opposition (#192)
6 on October 24, 2005.

7 A hearing was held on the Summary Judgment motions and the
8 Claim Construction issues on November 9, 2005.

9 For the reasons stated below, Defendants' motion (#189) will
10 be denied and Plaintiff's cross-motion (#193) will be granted. The
11 claims will be construed as set forth below.

12 13 **I. BACKGROUND**

14 Plaintiff alleges that Defendants have infringed Claims 11 and
15 12 of U.S. Patent 6,592,460 (hereinafter "'460" or "the invention"
16 or "the patent"). The patent, which was issued to the now-deceased
17 Mr. Torango on July 15, 2003, provides a complex system for gaming
18 devices to award progressive prizes. The infringement claims stem
19 from Plaintiff's over-arching claims that Defendants misused secret
20 elements of the patent, while the patent was pending, in order to
21 create their own progressive gaming systems.

22 The patent was developed to allow multiple devices, accepting
23 multiple forms of currencies, to link together to share in
24 progressive prize awards. ('460 Patent Abstract.) The patent has
25 17 claims. Only the meanings of terms in Claim 11 are presently in
26 dispute by the parties.

1 The summary judgment motions center on the issue of whether
2 the meaning of one of the disputed terms is indefinite, thereby
3 rendering the patent invalid. Thus, in order to address the
4 summary judgment issue, we must first conduct claim construction
5 analysis for that disputed term.

6 7 **II. DISCUSSION**

8 **A. Claim Construction Analysis**

9 The first step when analyzing both invalidity and infringement
10 is claim construction. Amazon.com, Inc. v. Barnesandnoble.com,
11 Inc., 239 F.3d 1343, 1351 (Fed. Cir. 2001). "Only when a claim is
12 properly understood can a determination be made whether the claim
13 "reads on" an accused device or method, or whether the prior art
14 anticipates and/or renders obvious the claimed invention." Id.
15 Claim construction is a question of law reserved for the court.
16 Markman v. Westview Instruments, Inc., 517 U.S. 370, 384 (1996).

17 In construing a claim term, we are to give it the "ordinary
18 and customary meaning" as that "term would have to a person of
19 ordinary skill in the art in question at the time of the
20 invention." Phillips v. AWH Corp., 415 F.3d 1303, 1312-13 (Fed.
21 Cir. 2005) (citations omitted). How a court is to determine the
22 understandings of such a person is not entirely clear. While the
23 opinions of actual persons of ordinary skill may be considered
24 through expert testimony, such evidence is considered extrinsic and
25 of secondary consideration to our inquiry. Id. at 1317-18.
26 Although the Phillips court does not address this seeming
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1 contradiction, it does provide a framework for determining the
2 above-described ordinary and customary meaning.

3 First, Phillips notes that sometimes the ordinary meaning of a
4 term to one skilled in the art is "readily apparent even to lay
5 judges." Id. at 1314. However, Phillips does not provide examples
6 of what such a readily apparent meaning may be. For terms whose
7 meanings are not readily apparent, Phillips advises:

8 the court looks to those sources available to the public
9 that show what a person of skill in the art would have
10 understood disputed claim language to mean. Those
11 sources include "the words of the claims themselves, the
12 remainder of the specification, the prosecution history,
13 and extrinsic evidence concerning relevant scientific
14 principles, the meaning of technical terms, and the state
15 of the art."

16 Id. (citations omitted). The first three categories (claims,
17 specification, and prosecution history) are considered intrinsic
18 evidence, while everything existing outside of the patent and its
19 history is considered extrinsic evidence. Vitronics Corp. v
20 Conceptronics, Inc., 90 F.3d 1576, 1582, 1584 (Fed. Cir 1986).

21 Phillips stops short of providing a clear-cut order of
22 consideration for the above forms of evidence. See, 415 F.3d at
23 1324 ("The sequence of steps used by the judge in consulting
24 various sources is not important"). However, Phillips does alert
25 trial courts to the "appropriate weight to be assigned to those
26 sources in light of the statutes and policies that inform patent
27 law." Id.

28 Of primary importance to discerning a term's meaning is the
language of the claims themselves and the specification, of which
the claims are an integral part. Id. at 1312. "In light of the

1 statutory directive that the inventor provide a 'full' and 'exact'
2 description of the claimed invention, the specification necessarily
3 informs the proper construction of the claims." Id. at 1316. As
4 stated by Phillips,

5 [u]ltimately, the interpretation to be given a term can
6 only be determined and confirmed with a full understanding
7 of what the inventors actually invented and intended to
8 envelop with the claim. The construction that stays true
to the claim language and most naturally aligns with the
patent's description of the invention will be, in the end,
the correct construction.

9 Id. As examples of how one may consider the text of claims for
10 determining term meanings, Phillips points to the terms' context,
11 usage in other claims, and differences of usage, particularly in
12 dependent and independent claims. Id. at 1314-15.

13 The prosecution history of the patent, although considered
14 intrinsic evidence and useful to the claim construction inquiry, is
15 accorded slightly less weight by the Phillips court. Id. at 1317
16 ("[B]ecause the prosecution history represents an ongoing
17 negotiation between the PTO and the applicant, rather than the
18 final product of that negotiation, it often lacks the clarity of
19 the specification and thus is less useful for claim construction
20 purposes.").

21 Finally, extrinsic evidence, which "can shed useful light on
22 the relevant art," is considered "less significant than the
23 intrinsic record in determining 'the legally operative meaning of
24 claim language.'" Id. at 1317 (citations omitted). Extrinsic
25 evidence "consists of all evidence external to the patent and
26 prosecution history, including expert and inventor testimony,
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1 dictionaries, and learned treatises." Id. The Phillips court
2 emphasized in particular that dictionaries, while potentially
3 useful to the analysis, were not to be accorded more authority than
4 intrinsic evidence in claim construction inquires. Id. at 1318-21.

5
6 **A. The Language of Claim 11**

7 The disputed terms are found in Claim 11, which follows:

- 8 11. A method of awarding a progressive prize, **comprising:**
9 (A) defining **a prize winning number;**
10 (B) **determining a total wager amount** for a **progressive**
11 **prize;**
12 (C) allowing a player to place a **wager**, the wager having
13 an amount;
14 (D) computing the **odds** of a handle pull generating a prize
15 award event using the total wager amount and the
16 amount of the wager, the **odds having a range of**
17 **outcomes**, the prize winning number being within the
18 range of outcomes;
19 (E) generating a random number within the range of
20 outcomes;
21 (F) comparing the generated random number to the prize
22 winning number; and
23 (G) awarding the progressive prize to the player if the
24 generated random number is **substantially equal** to the
25 prize winning number.

1 **1. Comprising**

2 Plaintiff proposes that the term "comprising" should be
3 construed to mean "including at least the steps of." Defendants
4 propose that "comprising" should mean simply "including."

5 The open-ended meaning of "comprising" is well-established in
6 the Federal Circuit. See, e.g., Mars, Inc. v. H.J. Heinz Co, LLP,
7 377 F.3d 1369, 1375-76 (2004) ("The transitional term 'comprising'
8 . . . is open-ended and does not exclude additional, unrecited
9 elements or method steps." (quoting Manual of Patent Examining
10 Procedure 8th ed., rev. 1 § 2111.03 (2003))); Genentech v. Chiron
11 Corp., 112 F.3d 495, 501 (Fed. Cir. 1997) ("'Comprising' is a term
12 of art used in claim language which means that the named elements
13 are essential, but other elements may be added and still form a
14 construct within the scope of the claim.")

15 Thus, we adopt Plaintiffs' proposed construction of
16 "comprising," meaning "including at least the steps of."

17
18 **2. Step (A): "A Prize Winning Number"**¹

19 Defendants urge us to limit "a prize winning number" to mean a
20 singular number, specifically the number 1. (Def. Br. at 12-13.)
21 Plaintiff claims that "a" has an open-ended meaning of "one or
22 more." (Pl. Resp. at 4.)

23
24
25 ¹ The term, "defining" was not among the terms highlighted by the
26 parties for construction, although it was addressed somewhat in the
27 briefings and hearing. The parties essentially agree on the meaning
28 of "defining" as "setting" or "fixing" or "making distinct," and we
do not address it further here.

1 In cases addressing the meaning of "a," especially within
2 claims involving "comprising," the Federal Circuit has recommended
3 an open-ended interpretation, unless a specific limitation or
4 evidence of intent to limit is found in the claims. Scanner Tech.
5 Corp. v. ICOS Vision Systems Corp., N.V., 365 F.3d 1299, 1304-06
6 (Fed. Cir. 2004). We have not found such an intent to limit in the
7 specification. Occasionally the claims refer to "the" prize
8 winning number, but that occurs in the claims only after an
9 immediate reference to "a" prize winning number, which implies that
10 "the" refers to the number of the previous reference, but not that
11 the number must be singular.

12 There are references in the specification to multiple prizes
13 and winners, which provide some basis to allow for the existence of
14 multiple prize winning numbers as well. For example, the Summary
15 of the Invention describes a system for linking game devices to "a
16 plurality of progressive prizes," and states that one of the
17 objectives of the invention is to allow players "to share in the
18 possibility of winning common progressive prizes." ('460 Patent,
19 col. 4:42-46, 20-24.) In addition, the summary states that "the
20 method enables the system to randomly select one or more of the
21 current participants as a winner." (Id., col. 4:37-38.)

22 However, multiple winners and prizes are not necessarily
23 equivalent to multiple prize winning numbers. The multiple winners
24 and prizes could be linked to one specific number that occurs in
25 the system more than once. Therefore, the real inquiry remains
26 whether the specification in any way limits the meaning of "prize
27 winning number." Defendants' proffered evidence in support of
28

1 finding that "a" must be singular is not convincing. First,
2 Defendants find only one potential reference in the specification
3 outside the claims: the use of the word "the." This usage appears
4 to apply to a device's generated number, not a prize winning
5 number, the reference to which in their example contains the
6 article "a." (Id. col 16:43-45 ("If the number produced was equal
7 to a predefined number, such as the number one ('1'), then the
8 prize award process would start."))

9 Next, Defendants claim that the number must be the number 1
10 because the odds have not been calculated yet, and the number must
11 be within the range of odds, and 1 is the only number that could
12 anticipate all odds. We disagree with Defendants that the
13 potential prize winning number must be the number 1. First, the
14 specification never states that the prize winning number must be
15 the number 1, but merely provides it as an example. The use of the
16 term "such as" lends more support to an inference that other
17 numbers are possible, than it confines the prize winning number to
18 being the number 1. In addition, the specification provides
19 examples of "win numbers" being numbers other than 1.² Furthermore
20 as discussed below, we are not convinced that the prize winning
21 number must be determined before the odds are determined, or that
22 the number one is guaranteed to fall within such a range of
23 numbers, and Defendants' argument thus fails on those grounds as
24 well.

25
26 ²To what extent "win numbers" are distinct from prize winning
27 numbers is not entirely clear from the specification, but the
28 similarity of the terms makes the reference worth noting.

1 The specification does not provide a clear indication of how
2 many prize winning numbers are envisioned by the inventor. As
3 stated by the Federal Circuit, "unless the claim is specific as to
4 the number of elements, the article 'a' receives a singular
5 interpretation only in rare circumstances when the patentee evinces
6 a clear intent to so limit the article." Id. at 1304. Because we
7 have not found evidence of an intent to limit the amount of prize
8 winning numbers in the specification, we do not import any
9 quantitative limitation onto Step (A). Thus, we find that "a"
10 means "one or more."

11 12 **3. Step (B): "Determining"**

13 Defendants claim that "determining," as used in Step (B),
14 means "receiving a total wager amount from the central system and
15 storing it in memory." (Def. Resp. at 4.) Plaintiff claims that
16 "determining" means "fixing," "deciding upon," and "set[ting] to a
17 desired amount needed to finance the average prize value . . .
18 without regard to the mathematical exact combinations or pay tables
19 of any of the linked gaming devices." (Pl. Br. at 21.) Plaintiff
20 uses the terms "fixing," "deciding upon," and "setting,"
21 interchangeably.

22 Defendants primarily contend that "determining" must include
23 "receiving and storing," because they claim that the fact that an
24 amount is received and stored is what is special about the patent
25 and Claim 11, and Step (B) should be the appropriate place for that
26 to happen. (Def. Resp. at 5-7.) Defendants' authority for this
27 proposition comes from the prosecution history wherein the
28

1 applicant distinguished Patent '460 from prior art by stating "the
2 function being claimed in Claim 11 for the central system is the
3 ability to record a total wager amount for a progressive prize."
4 (Def. Br. Appendix, tab. 8 at 141.) However, the claim being
5 addressed by that particular statement was the prior claim 11 of
6 the application, which later became Claim 8 in the actual '460
7 patent, once claims 1-3 were removed. Indeed, Claim 8, step A,
8 does specifically disclose the recording of the total wager amount.
9 ('460 patent, col 23 at 30-31.) We have not found any reference in
10 the specification of Claim 11 that indicates that storing is a
11 particular characteristic of Claim 11.

12 Plaintiffs more persuasively contend that receiving and
13 storing capabilities are device-specific, not invention-specific,
14 and are addressed in other claims. Some devices will store the
15 total wager amount, while others would not need to, and the
16 invention is a system for linking all of those different devices.
17 Devices that store would have a free play apparatus, which is
18 discussed in separate claims, such as Claim 8 (discussed above),
19 Claim 14 ("[t]he method of claim 11 further comprising providing a
20 free play apparatus . . .") and Claim 16 ("[a] free play apparatus
21 . . . comprising . . . (B) at least one processor, the processor
22 being adapted to perform at least the following: (a) store
23 information about a progressive prize, including total wager
24 amount.") The fact that "storing" is specifically mentioned in
25 other claims, but is not mentioned in Claim 11, supports a finding
26 that "determining" does not encompass the meaning "storing." See
27 Phillips at 1315 ("the presence of a dependent claim that adds a
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1 particular limitation gives rise to a presumption that the
2 limitation in question is not present in the independent claim.”)

3 Because we find that the role of “storing” is not disclosed in
4 Claim 11, and it is disclosed in other claims, and because the
5 specification supports a reading of Claim 11 that would not require
6 the disclosure of “storing,” we do not construe the meaning of
7 “determining” to include the role of “storing.” Therefore, we
8 adopt a version of Plaintiff’s proposed construction as follows:
9 “determining” means “set[ting] to a desired amount needed to
10 finance the average prize value.”³

11 12 **4. Step (B): Total Wager Amount**

13 Both parties characterize the “total wager amount” as “a sum
14 of all wagers made for each prize award.” Where they differ is
15 that Defendants claim the amount should be an actual number “not
16 implicit from or capable of being derived from the hardware and/or
17 software of the gaming device,” whereas Plaintiff claims the number
18 can be created by a person or the system in order to meet the needs
19 of various criteria. (Pl. Resp. at 8.) In addition, Defendants
20 emphasize that the total wager amount serves as a link between
21 devices and prizes, while Plaintiff argues that linkage may occur,
22 but it should not be a limitation of the claim. (Pl. Resp. at 7-
23 8.)

24 The specification supplies a definition for total wager
25 amount:

26
27 ³From Plaintiff’s three proposed terms, we adopt the one with the
28 simplest and most neutral meaning: setting.

1 For a progressive prize, this is the theoretical sum of
2 all wagers made for each prize award event. The total
3 wager amount must be of a value that will support all the
4 criteria for the prize starting value, increment values,
5 and any other values generated as a result of
6 contribution percents applied against wagers.

7 ('460 Patent, col. 8:10-15.) When a specification reveals a
8 special definition for a term, the inventor's lexicography governs.
9 Phillips at 1316. Thus, the above definition forms the basis for
10 our construction. We now look at the specification and prosecution
11 history to determine whether the limitations suggested by
12 Defendants should be adopted as well.

13 The Background of the Invention portion of the specification
14 emphasizes that prior art had the wager amount and odds fixed in
15 the individual devices, thus making any change of those amounts,
16 for example due to varying market or regulatory conditions, costly
17 and difficult. ('460 Patent, col. 3:34-42.) In contrast, this
18 invention can use a common total wager amount to link devices with
19 different fixed or programmable currencies and wagers together in
20 order to share a progressive prize. (Id. at col. 3:64-67, col.
21 5:5-14.) This process is most clearly explained in the prosecution
22 history:

23 Unlike prior art methods, the preferred embodiment can
24 link gaming devices regardless of the wager/odds
25 combination because the preferred embodiment utilizes a
26 theoretical total wager amount to obtain a maximum
27 random number range. Thus if a player wants to play a
28 progressive game, a theoretical total wager amount is
used, e.g. \$10,000,000. The total wager amount may then
be divided by the player's wager amount of \$2 to obtain
a maximum random number range of 50,000. The free play
apparatus then generates a random number within 50,000
or the corresponding maximum random number range. If
the generated random number matches a predetermined
prize winning number, then the player is awarded a
progressive prize.

1 ('460 prosecution history at 136, Def. Hearing Ex. I.) Thus, an
2 advantage of the instant invention is its ability to link devices
3 with differing odds and wagers by dividing the theoretical total
4 wager amount for each prize award by the individual wagers of the
5 machines to achieve a number range from which a random number can
6 be generated.

7
8 The total wager amount's ability to link devices is clearly an
9 important aspect of the invention, as is its status as a
10 theoretical amount, rather than the actual total of wagers bet.
11 However, that does not mean that devices that do have total wager
12 amounts inherent in them cannot be linked to the progressive prizes
13 in this invention, or that those total wager amounts may not be
14 considered somehow in the formulation of the theoretical total
15 wager amount. The purpose of the invention is to link devices
16 together, some of which may have fixed total wager amounts, through
17 a theoretical total wager amount which may override the fixed ones
18 through a free play apparatus. This purpose does not preclude
19 using fixed total wager amounts, or the regulatory, industrial, or
20 mechanical limitations that created them, from influencing the
21 setting of theoretical total wager amounts. Therefore, Plaintiff's
22 proposed construction, which recognizes the diverse considerations
23 going into formulating a total wager amount, is more in line with
24 the specification than Defendants' proposed construction, the
25 adoption of which could unnecessarily preclude the consideration of
26 the hardware or software of a particular device. Because we are
27 not authorized to read into a claim an element that is not present
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1 in the claim itself, McCarty v. Lehigh Val. R. Co., 160 U.S. 110,
2 116 (1895), particularly where another construction "most naturally
3 aligns with the patent's description of the invention," Philips,
4 415 F.3d at 1316, we reject Defendants' proposed limitation that
5 the total wager amount must not be implicit from or capable of
6 being derived from the hardware and/or software of the gaming
7 device.

8 _____ However, Defendants' proposed limitation that the total wager
9 amount must serve as a link between the devices is naturally
10 aligned with the specification, and thus presents more of a
11 dilemma. While the total wager amount's linking role is not
12 mentioned in Claim 11, it is touted as a salient point of the
13 invention throughout the specification. (E.g., '460 Patent, col.
14 3:46-56, "This invention incorporates [the advantage of linking a
15 gaming device to a progressive prize without changing the device's
16 hardware or software] by using the total wager amount as the basis
17 of linkage between a prize and a gaming device;" id., col 5:5-10,
18 "Unlike prior art progressive gaming systems and methods that
19 control linkage between progressive prizes and game pay lines based
20 on some representation of a coin of a specific denomination issued
21 in a specific currency, this invention uses the total wager amount
22 as a common element shared between progressive prizes and the
23 linked game pay lines.") The specification does not discuss any
24 characteristic or component other than the total wager amount as a
25 means of linking the devices with the prizes. Therefore, it is
26 hard to envision an embodiment of this invention that does not
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1 utilize the total wager amount as the basis of linkage between the
2 devices and prizes.

3 Finally, while Claim 11 does not specify that the total wager
4 amount is the link, when the role of the total wager amount is
5 isolated within the claim, it appears to be a linking role. Step
6 (B) provides for determining a total wager amount for a progressive
7 prize. Steps C and D occur at the individual device level, setting
8 up factors to be considered with the total wager amount in
9 generating a random number for an individual hand pull (Step E), to
10 be compared to the prize's winning number (Step F). Because the
11 total wager amount provides part of the equation used in generating
12 the random number, and because the wager is discussed by the
13 specification as being potentially device-specific, and is put
14 forth in the claims at the device level, the role of the total
15 wager amount as the link between the device and a particular prize
16 is implicitly provided in Claim 11. Thus, the meaning of the total
17 wager amount should include its role as a link between devices and
18 prizes. However, we do not see the need to limit that meaning to
19 be *the only* link between devices and prizes.

20 Therefore, we adopt the following construction of total wager
21 amount as used in Step (B) of Claim 11:

22 The theoretical sum of all wagers made for each prize
23 award event. The total wager amount must be of a value
24 that will support all the criteria for the prize
25 starting value, increment values, and any other values
26 generated as a result of contribution percents applied
27 against wagers. The total wager amount serves as a link
28 between devices and a progressive prize.

5. Step (B): Progressive Prize

The specification provides a definition for "progressive prize": "A prize that starts at some value then is incremented as wagers are placed on gaming devices linked to the prize. The increment value is the result of multiplying the value of the wagers made by a contribution percentage." (Col. 7 at 50-53.) Both parties adopt this construction, however, Defendants propose to limit the meaning to one singular progressive prize, and suggest defining "increment value" as the "difference between the prize's starting value and the prize's current value."

_____ Defendants' proposal to limit "progressive prize" to one single prize shadows their proposal and our discussion of "a prize winning number" above. First, as discussed above, the caselaw cautions against imposing a singular limitation on the article "a." See Scanner Tech. Corp. v. ICOS Vision Systems Corp., N.V., 365 F.3d 1299, 1304-06 (Fed. Cir. 2004). Defendants counter that undue emphasis should not be placed on the article "a," as Claim 11's references to "a progressive prize" in the preamble and Step (B) mutate into "the progressive prize" in Step (G). However, the term that we are called upon to construe is that attached to the total wager amount determined in Step (B). While the use of "the" in Step (G) may shed some light on its meaning in other steps, it does not negate any inferences contained in the prior uses of "a." As argued by Plaintiff, the use of "the" indicates that Step (G) is merely referring to the progressive prize described in Step (B), not that the prize must be singular. We adopt that reasoning as the most plausible interpretation of the use of different articles

1 modifying "progressive prize" in Claim 11, and focus our
2 construction on the use of the open-ended "a" in Step (B).

3 Second, there are several references to multiple progressive
4 prizes in the specification. (See, '460 Patent, col. 4
5 throughout.) Indeed, in a discussion of the Free Play apparatus,
6 the preferred embodiment provides a selection button to choose from
7 multiple prizes. (Id. col. 15:63 - col. 16: 2.) The specification
8 even allows for more than one winner for a prize. (Id. col. 4:36-
9 38.)

10 In her argument against a singular limitation, Plaintiff
11 suggests that a prize could be a valuable object plus a variable
12 monetary amount, or a choice between different prizes. While the
13 specification's references to multiple prizes and winners stop
14 short of expressly providing for the possibility of multiple prizes
15 attaching to a particular total wager amount or a handle pull, we
16 have not found any language in the specification that would rule
17 out this possibility. Thus, we find no basis to limit the meaning
18 of "a progressive prize" to a singular prize.

19 In addition, we do not find sufficient basis at this time to
20 limit the meaning of "increment value" to the "difference between
21 the prize's starting value and the prize's current value."
22 Although Defendants argued for such a limitation in their briefing,
23 they did not so argue at the hearing, and the succinct arguments in
24 their brief were not persuasive, as they primarily relied on expert
25 testimony merely claiming that the ordinary meaning was such. In
26 addition, it is not obvious that Defendants' proposal is easily
27 reconciled with the specification's definition and usage of
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1 "increment value." The specification's definition, although less
2 than crystal clear, does provide that "the increment value is the
3 result of multiplying the value of the wagers made by a
4 contribution percentage." ('460 Patent, col. 7:51-53.) In
5 addition, the specification describes the use of a "prior increment
6 value" within the equation for calculating current prize values.
7 (Id. at col. 19:18-38.) In that equation, the prior increment
8 value is added to the minimum prize amount, and that sum is added
9 to a figure that is the result of the multiplication of accumulated
10 wagers with a particular exchange rate, increment percent, and
11 surcharge percent. (Id.) The multiplied portion of the equation
12 appears to be a more detailed version of "the result of multiplying
13 the value of the wagers made by a contribution percent," put forth
14 as the definition of the increment value in the specification as
15 described above. While these equations from the specification may
16 be compatible with Defendants' proposed definition of increment
17 value, without more compelling evidence in support of how they are
18 compatible, we are not persuaded that it should be adopted as a
19 limitation.

20 Therefore we adopt the definition of progressive prize put
21 forth in the specification at col. 7:50-53, without any of the
22 limitations proposed by defendants.

24 **6. Step (C): Wager**

25 Plaintiff suggests that "wager" should mean "bet" and provide
26 a dictionary definition for wager: "something (as a sum of money)
27 that is risked on an uncertain event." (Pl. Br. at 22, citing
28

1 Webster's, Ex. B.) Defendants argue in their Brief that the
2 meaning of "wager" should be limited to a "specific sum of money."
3 (Def. Br. at 21.) Defendants did not allocate much of their time
4 in the hearing to the meaning of "wager," except beyond indicating
5 it should be a monetary amount. Plaintiff did not dispute this
6 argument at the hearing and even proposed that the term "wager
7 having an amount" means "a wager having a numerical currency
8 value."

9 There is no support in the specification to limit the meaning
10 of "wager" to a "specific sum of money," and indeed, a great deal
11 of support for the proposition that diverse wager amounts are
12 allowed for in the invention. While the preferred embodiment does
13 refer to the "wager amount of a specific bet," this appears to have
14 a distinct meaning from "specific sum of money," namely that an
15 individual bet has a specific amount, but other amounts for other
16 wagers are anticipated. Defining "wager" to mean "a specific sum
17 of money" could limit the invention to allowing only one kind of
18 wager - an unsupported outcome that would destroy the invention's
19 distinction from prior art and invalidate the patent.

20 However, the parties apparently agree that "wager" involves
21 monetary value. Nevertheless, neither party points to a definition
22 or a means of understanding the term from the specification which
23 we could adopt as a clear definition. Given the lack of limitation
24 presented by the specification and the fact that the extrinsic
25 dictionary definition provided by Plaintiff does not appear to
26 contradict the specification's usage of the term "wager," we adopt
27 the dictionary definition presented by Plaintiff.

1 **7. Step (D): Odds Having a Range of Outcomes**

2 We find that the meanings of the terms "odds" and "odds having
3 a range of outcomes" are inter-dependent, and thus we will address
4 them together in this section.

5 Defendants suggest that "odds" means: "the inverse of the
6 probability of winning a particular progressive prize." (Def.
7 Resp. at 11.) For example, if the probability is 1/1000, the
8 inverse probability is a single number, 1000. Plaintiff suggests
9 that "odds" means "the ratio of two [undefined] numbers." (Pl.
10 Resp. at 17.) In the Joint Claim Construction and Pre-Hearing
11 Statement (#87), Plaintiff's proposed construction of "odds" is
12 "the ratio of the probability of a progressive award event
13 occurring to that of a non-progressive prize award event
14 occurring."

15 We first look to the claim terms for guidance for construing
16 the meaning of "odds." See Phillips, 415 F.3d at 1312; Vitronics,
17 90 F.3d at 1582. In the case of "odds," Steps (D) and (E) provide
18 substantial guidance:

- 19 (D) computing the odds of a handle pull generating a
20 prize award event using the total wager amount and
21 the amount of the wager, the odds having a range of
22 outcomes, the prize winning number being within the
range of outcomes;
(E) generating a random number within the range of
outcomes;

23 First, Step (D) describes computing odds by using the total
24 wager amount and the amount of the wager. However, the step does
25 not indicate exactly how those amounts should be used to compute
26 the odds, and we must look to the specification for guidance in
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28

1 that capacity. Nevertheless, the rest of the steps provide
2 guidance as to the purpose of the odds.

3 When read by itself, the phrase, "the odds having a range of
4 outcomes," could mean that there are a range of outcomes for the
5 odds. If this meaning were to be adopted, we still would not know
6 whether the outcome was intended to be a single number or a ratio.
7 However, when examined in conjunction with step (E) of Claim 11, we
8 see the phrase, "generating a random number within the range of
9 outcomes." With this phrase in mind, a more sensible reading of
10 "the odds having a range of outcomes" would be "the odds providing
11 a range of outcomes to be used to generate the random number."
12 This construction gives the odds a purpose within the claim:
13 creating a range of numbers from which the generated random number
14 is chosen. Without this purpose for Step (D), there is no other
15 range of outcomes in the claim from which to generate the random
16 number. This purpose provides substantial support for the
17 proposition that "odds" should be construed to encompass a
18 relationship between two numbers, as a range cannot exist within
19 one number alone.

20 For the most part, this construction is supported by the
21 specification. The specification provides an equation "for
22 creating a set of numbers for the random number generator." ('460
23 Patent, col. 16 at 12-13.) $MR = PT/WG$, where MR = the maximum
24 number for the range of random number selection, PT = prize's total
25 wager amount, and WG = wager made as a multiple of the lowest
26 monetary unit. (Id. at 16-24.) The specification does not
27 describe this equation as a means for calculating odds, however, it
28

1 certainly appears related to the odds calculation and purpose set
2 forth in the claims, as it uses the wager and the total wager
3 amount to create a set of numbers for the random number generator.

4 In discussing this equation further, the specification states
5 "the computed odds, represented by the maximum number for range of
6 random numbers." Defendants argue that this sentence indicates
7 that the computed odds must be a single number, the inverse of the
8 probability of winning a particular prize. However, such a
9 construction appears to contradict the purpose of odds as set forth
10 in the claims: to provide a range of numbers (outcomes) from which
11 to generate a random number. This poses the question, then, can
12 the odds be "*represented by*" a single number and yet be more than
13 one number - or a relationship between numbers - which thus creates
14 a range of numbers.

15 We find that it can, and that a construction of "odds" as the
16 mathematical relationship of two numbers, wherein the total wager
17 amount is divided by the individual wager, and the resulting figure
18 provides a ratio of two numbers, which in turn provides a range of
19 numbers from which to generate a random number, is the construction
20 most supported by the claim terms, the overall meaning of the
21 specification, and common understandings of the term. While
22 portions of the specification occasionally refer to the odds as a
23 single number, say 14,285,715 (col. 3 at 3 (in discussion of prior
24 art)) we find that such usage can also imply a relationship between
25 two numbers, i.e. 14,285,715 divided by 1. Any other understanding
26 would obfuscate the purpose of the odds: to provide a range of
27 numbers. Indeed, the testimony of both parties' experts did not

1 provide any basis for a finding that one of ordinary skill would
2 commonly understand the meaning of "odds" to be a single number.
3 Defendants' expert, Mr. Bertram, indicated that such usage was
4 unusual, though not unheard of; and Plaintiff's expert, Mr. Ladner,
5 indicated that such usage would imply a relationship between two
6 numbers, the number provided and one.

7 We are cognizant that the construction proposed by Defendants
8 is a form of a relationship between two numbers - an inverse
9 probability represented by a single number. Such a construction
10 does find support in the specification. However, we find such a
11 construction's emphasis on the singularity of the number, when
12 taken to the extreme, could potentially invalidate the patent by
13 obfuscating the purpose of the odds - creating a range of numbers
14 for random number generation. In addition, we reject the second
15 portion of Defendants' proposed construction as the specification
16 and claim terms do not discuss "odds" in relation to the
17 probability of winning a prize award, but rather focus on the
18 relationship of the total wager amount and the wager, and the use
19 of these figures for creating a range of numbers.

20 Nevertheless, Plaintiff's proposals are not more helpful.
21 Plaintiff's first proposed construction is overly broad, as it
22 emphasizes that the numbers are undefined. While we recognize that
23 a purpose of the invention is to allow for diverse odds and wagers,
24 and we do not want to adopt a construction which would interfere
25 with that purpose, we find that some mention of the claim's
26 parameters for the odds would be helpful. In addition, Plaintiff's
27 second proposed construction, "the probability of a progressive
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1 prize award event occurring . . .” is not clearly supported by the
2 claim terms or the specification. The odds may relate to the
3 probability of winning, but the specification does not discuss this
4 enough to warrant its inclusion as a limitation of the claim.

5 However, the Plaintiff’s use of the term “ratio,” while not
6 used specifically in the specification, does support the meaning of
7 the equation discussed above, wherein one figure is divided by
8 another. Use of the term, “ratio” is well-supported by extrinsic
9 evidence. One dictionary definition of “odds” is “[t]he ratio of
10 the probability of an event’s occurring to the probability of its
11 not occurring.” The American Heritage Dictionary (4th Ed. 2004).
12 In turn, a dictionary definition of ratio is: “The relation between
13 two quantities expressed as the quotient of one divided by the
14 other.” Id. Because such a meaning is not contradicted by the
15 specification (even a singular number is a ratio between that
16 number and one), our seeking guidance from this extrinsic evidence
17 is appropriate. See Phillips, 415 F.3d at 1317-18. Therefore, we
18 adopt the following construction for “odds”: a ratio of two
19 numbers, represented by the total wager amount divided by an
20 individual wager, creating a range from which a random number may
21 be generated.

22 23 **8. Substantially Equal**

24 Step (G) of Claim 11 provides: “awarding the progressive prize
25 to the player if the generated random number is substantially equal
26 to the prize winning number.”

1 Defendants claim that the meaning of "substantially equal" is
2 undefined in the patent, and hence indefinite. Plaintiffs suggest
3 that "substantially equal," as used in the claim, means "equal."
4 If Defendants are correct that the meaning of "substantially equal"
5 is indefinite, then the claim would be invalid, and their motion
6 for summary judgment should be granted. See 35 U.S.C. 112 ("The
7 specification shall conclude with one or more claims particularly
8 pointing out and distinctly claiming the subject matter which the
9 applicant regards as his invention."); Seattle Box Co., Inc. v.
10 Indust. Crating & Packaging, Inc., 731 F.2d 818, 826 (Fed. Cir.
11 1984).

12 Rejecting "a broad concept of indefiniteness, [wherein] all
13 but the clearest claim construction issues could be regarded as
14 giving rise to invalidating indefiniteness in the claims at issue,"
15 the Federal Circuit has created the following standard for
16 assessing indefiniteness: "If one skilled in the art would
17 understand the bounds of the claim when read in light of the
18 specification, then the claim satisfies section 112." Exxon
19 Research & Eng'g Co. v. U.S., 265 F.3d 1371, 1375 (Fed. Cir. 2001).
20 Noting the complexity of the inquiry, the Exxon court stressed that
21 "[i]n determining whether that standard is met, i.e., whether 'the
22 claims at issue are sufficiently precise to permit a potential
23 competitor to determine whether or not he is infringing,' we have
24 not held that a claim is indefinite merely because it poses a
25 difficult issue of claim construction." Id. (internal citation
26 omitted). "If the meaning of the claim is discernible, even though
27 the task may be formidable and the conclusion may be one over which
28

1 reasonable persons will disagree, we have held the claim
2 sufficiently clear to avoid invalidity on indefiniteness grounds.”
3 Id. Once a patent has been issued by the PTO, it possesses a
4 presumption of validity, and a challenging party must present clear
5 and convincing evidence to overcome that presumption. Datamize,
6 LLC v. Plumtree Software, Inc., 417 F.3d 1342, 1347-48 (Fed. Cir.
7 2005).

8 When faced with a similar allegation that the use of the term
9 “substantially equal” rendered a claim indefinite, the Federal
10 Circuit emphasized the need to determine whether the specification
11 provides a standard for measuring the degree of equality
12 encompassed by the term “substantially.” Seattle Box Co., 731 F.2d
13 at 826 (rejecting indefiniteness where specification identifying
14 the purpose of a device could support a standard for measuring the
15 degree needed to be considered); see also Mikowski v. Visi-Trak
16 Corp. 36 F. Supp. 2d 171, 178 (S.D.N.Y. 1999) (“In this case, it is
17 clear that the term [of art] “substantially” has been included
18 merely to bridge the gap between the abstract description of a
19 method and its practical application in the real world. . . . [and]
20 adds nothing to the claim.”). An issued patent should not be
21 invalidated, even where some amount of experimentation is necessary
22 to determine the degree required, if the claims otherwise enable
23 the patent. Exxon Research, 265 F.3d at 1379 (also distinguishing
24 another “substantially” case involving patent application, as
25 opposed to issued patent, and where determining precise degree was
26 critical to invention); Seattle Box Co., 731 F.2d at 826.

1 Here the specification provides some minimal basis for
2 determining what degree of equality is required. In the portions
3 of the specification addressing the matching of the random number
4 to the prize winning number, it states that the numbers must be
5 equal. ('460 patent, col. 23:50-51, col. 16:43-45.) Although the
6 only time the term "substantially equal" is used outside the claims
7 is in connection with total wager amounts, its use in that passage
8 provides some guidance for the meaning of the term and how a person
9 of ordinary skill would understand the term in order to avoid
10 infringement.⁴ (Id. at col. 12:66 - col. 13:2 ("From the
11 regulatory viewpoint, these checks ensure that the theoretical
12 total wager amounts are substantially equal."))

13 The purpose of the patent is to link international gaming
14 devices with diverse regulatory standards and currency
15 fluctuations. The numbers are generated by mathematical formulas
16 which include multiplying incremental and surcharge percentages of
17 such minimal size as .00000415979493 (id. at col. 14:26),
18 indicating that some devices may not present exact integer matches.
19 Furthermore, different devices in different zones may have
20 different regulatory standards requiring different exactitude in
21 matches. A person of ordinary skill in the art should be able to
22 engage in some amount of experimentation with these standards and
23 percentages in order to determine what degree of equality is
24 required between the random generated number and the prize winning

25
26 ⁴We reject Defendants' argument that because "substantially
27 equal" is used elsewhere in the specification, Mr. Torango should have
28 used it in the portion describing the random number comparison, and
since he did not, the term is indefinite.

1 number in order to produce an effective match while meeting the
2 regulatory standards. The fact that the specification does not
3 specify this degree is not fatal, given the presumption of validity
4 attached to this issued patent and the fact that the patent does
5 not indicate that the precise degree of equality is critical to the
6 invention. See Exxon Research, 265 F.3d at 1379.

7 Thus, we find that the use of the term "substantially equal"
8 does not render Claim 11 indefinite and summary judgment should not
9 be rendered in favor of Defendants on that basis. Furthermore, we
10 construe the term "substantially equal" to mean "equal to the
11 extent that diverse regulatory standards and currencies are applied
12 and the purpose of the invention is enabled."

14 **9. Order of Steps**

15 Plaintiff argues that no specific order should be attributed
16 to the steps of Claim 11. Defendants argue that the steps should
17 be limited to the order in which they are written. According to
18 the Federal Circuit:

19 First, we look to the claim language to determine if, as
20 a matter of logic or grammar, [the steps] must be
21 performed in the order written. For example . . . we
22 [have] held that the claim language itself indicated that
23 the steps had to be performed in their written order
24 because the second step required the alignment of a
25 second structure with a first structure formed by the
26 prior step.

27 Altiris, Inc. v. Semantec Corp., 318 F.3d 1363, 1369-70 (Fed.
28 Cir. 2003) (internal citation omitted).

29 In applying the above analysis, we find that Step (D) is
30 dependent on Steps (B) and (C)'s having already occurred; and

1 that Steps (E), (F), and (G) necessarily must occur in order
2 after Step (D); and that Step (A) may come after Steps (B),
3 (C), and possibly even (D) and (E), but in any case, must come
4 before (F) and (G).

5 Step (A) provides "defining a prize winning number."
6 Step (D) contains the phrase, "the prize winning number being
7 within the range of outcomes." As discussed above, the range
8 of outcomes is the range from which a random number will be
9 generated, to be ultimately compared to the prize winning
10 number. The parties have not convinced us that the prize
11 winning number must be determined prior to the creation of the
12 range of numbers from which the random number is generated.
13 The use of the gerund "being," in the phrase "the prize
14 winning number being within the range of outcomes," without a
15 participle indicating past, present, or future, does not
16 itself dictate when the prize winning number is determined.
17 In addition, it is certainly plausible that the range of
18 numbers is best created prior to the determination of the
19 prize winning number, in order to ensure that the prize
20 winning number is within the range. Given that the only
21 mandates for setting the range of numbers are that the total
22 wager amount and the wager are used, the pre-determination of
23 the prize winning number appears unnecessary for that
24 calculation, and could even interfere with the ultimate
25 workings of the invention.

1 Similarly, Step (A) need not come before Step (E), as (E)
2 only calls for generating a random number withing the range of
3 outcomes. While Defendants point to the portion of the
4 specification comparing the random generated number to "a
5 predefined number" ('460 Patent, col. 16:43-45) as support for
6 their argument that Step (A) must come before Step (E), we
7 find this passage to only indicate that the number must be
8 defined prior to the comparison occurring in Step (F) and not
9 prior to the generation of the random number in Step (E).

10 Thus, we find that Step A may occur at any step prior to Step
11 (F).

12 We further find that Step (B) (determining a total wager
13 amount) and Step (C) (placing a wager) must come before Step
14 (D) as those figures are necessary to calculate the range of
15 numbers as provided in Step (D).

16 Finally, we find that Step (F) must come after Steps (A)-
17 (D) as the completion of those steps are necessary to Step
18 (F), and that Step (G) must come after Step (F) and the other
19 steps for the same reason.

20 Therefore, we find that the following order of steps is
21 required by the patent: (B) and (C) must occur before (D), but
22 the two may be performed in either order or simultaneously.
23 (D) must occur before (E), (F), and (G). (A) may occur at any
24 time before (F). (E) must occur after (D) and before (F) and
25 (G). (F) must occur after (D), (E), and (A) and before (G).
26 (G) must occur after (F) and all of the other steps.

1 **IT IS, THEREFORE, HEREBY ORDERED** that Defendants' Motion
2 for Summary Judgment (#189) is **DENIED**. The '460 patent is not
3 invalid for indefiniteness, as set forth above.

4
5 **IT IS, FURTHER, HEREBY ORDERED** that Plaintiff's Motion
6 for Summary Judgment (#193) is **GRANTED**. The '460 patent is
7 not invalid for indefiniteness, as set forth above.

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10 **IT IS, FURTHER, HEREBY ORDERED** that, the disputed claim
11 terms are to be construed as set forth above.

12
13 DATED: This 30th day of December, 2005.

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16 A handwritten signature in black ink, reading "Edward C. Reed." The signature is written in a cursive, flowing style. The first name "Edward" is written in a larger, more prominent script, followed by "C." and "Reed." The signature is positioned above a horizontal line.

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18 UNITED STATES DISTRICT JUDGE
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